## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Petition Pursuant to 47 U.S.C. §160(c)	)	WT Docket No. 02-377
For Forbearance from E911	)	
Accuracy Standards in Section 20.18(h)	)	
Of the Commission's Rules	)	

## **COMMENTS OF VERIZON WIRELESS**

Verizon Wireless hereby submits its comments on the Tier III Coalition's petition urging the Commission to forbear from enforcing the E911 accuracy and reliability standards set forth in Section 20.18(h) of the Commission's rules only with respect to Tier III carriers.<sup>1</sup> There is no legal or policy justification for applying varying technical and reliability deadlines or standards based on carrier size. The Commission has not previously granted different E911 technical rules for small carriers.<sup>2</sup> Carrier size is not relevant when it comes to the laws of physics, the propagation properties of radio frequency, or whether satellites and/or wireless networks can accurately locate a mobile caller in rural areas. The Section 10 forbearance standard requires the FCC to determine, among other things, whether forbearance from its accuracy requirements is consistent with the public interest.<sup>3</sup> If forbearance is consistent with the public interest because of

The Tier III Coalition requested forbearance for a 2-3 year period up to and including December 31, 2005. *See* Tier III Coalition petition, WT Docket No. 02-377, dated November 20, 2002, at i ("Petition").

For example, the FCC did not create a small carrier exception when it required carriers to implement one of the three 911 call completion methods in the Second Report and Order. *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Second Report and Order, 14 FCC Rcd. 10954 (1999).

<sup>&</sup>lt;sup>3</sup> 47 U.S.C. § 160.

inherent technological limitations of E911 technologies, any grant of forbearance should be applicable to <u>any</u> wireless carriers operating in rural areas regardless of overall size.

The Tier III Coalition petition discusses the issues associated with network-based solutions and handset-based solutions in rural environments.<sup>4</sup> As a nationwide provider, Verizon Wireless must meet the Commission's requirements in its diverse licensed areas. Verizon Wireless has experience utilizing both a network-based solution and a handset-based solution in live Phase II deployments with PSAPs.

The Tier III Coalition petition cites the Hatfield Report and the E911 docket generally for the proposition that rural areas present special challenges for *network-based* solutions.<sup>5</sup> Verizon Wireless agrees that the number of base stations and network elements sufficient to provide quality CMRS voice calling over vast swaths of rural geography is often not sufficient for triangulating the location of mobile callers. Wireless networks were designed for voice communication, not for location determinations. The investment necessary to achieve the Commission's accuracy requirements utilizing a network-based solution can be prohibitively expensive for carriers operating in rural areas regardless of size. Verizon Wireless migrated away from a network-based solution in fact because of these challenges and because the AGPS/AFLT handset-based solution offered greater accuracy, *especially* in rural areas where GPS satellites have a clearer, less obstructed path to the mobile caller's handset.<sup>6</sup> Thus, the issue is not the carrier's size (based on number of subscribers) but technical limits to the technology. To the extent the Commission determines that those limits warrant forbearance from enforcing

<sup>4</sup> Petition at 14.

Petition at 14-23.

In densely populated urban areas, achieving accurate location fixes depends much more heavily on the AFLT network component of our AGPS/AFLT technology.

accuracy standards for network-based solutions, such relief must be available to <u>all</u> carriers.

Given that a *handset-based* solution is likely to work best in rural areas, Verizon Wireless is puzzled by the Tier III Coalition's statements regarding handset-based accuracy levels.<sup>7</sup> The Tier III Coalition maintains that the engineering and manufacture of ALI-capable handsets presents concerns for achieving the requisite accuracy levels.<sup>8</sup> While Verizon Wireless has no information regarding the availability of compliant handsets for other air interfaces, it can attest to the availability of compliant handsets for CDMA-based carriers. Verizon Wireless is now selling ten different models of ALI-capable handsets that are capable of achieving the Commission's accuracy requirements in rural areas. In our experience, the AGPS component of our E911 technology can in fact work well in open areas devoid of obstruction from tall, close standing buildings and structures.

Even assuming that the Tier III Coalition is correct in asserting that the automobile (assuming no link between the handset and the exterior antenna) could cause the degradation of GPS accuracy calculations depending upon the amount of structural and morphological attenuation,<sup>9</sup> this problem would not be limited to situations involving small carriers. This technical limitation, to the extent it exists, would be true for a Verizon Wireless customer riding in a vehicle as readily as it would be for a customer of a Tier III carrier riding in the same vehicle. If technical issues prevent carriers from meeting prescribed accuracy levels, all carriers operating in rural areas would need time

-

<sup>&</sup>lt;sup>7</sup> Petition at 26.

Petition at 23.

Petition at 26.

to work through technical difficulties. Thus, for handset-based technologies as well, any relief should be industry-wide.

If the core problem is that small carriers lack the resources necessary to purchase compliant equipment, the Tier III Coalition should help them explore whether sharing certain network elements such as Position Determining Equipment ("PDE") or sharing vendors could mitigate costs. Verizon Wireless has two PDEs for its footprint supporting more than thirty million customers. Perhaps several small carriers could share one PDE or otherwise employ a service bureau for the entirety of their collective footprints and subscribers. For example, it is not uncommon for carriers to share a switch when it is uneconomic to purchase and operate a switching facility given the carriers' subscriber base in a given area. The Tier III Coalition, to the extent possible, should cooperate to develop technical and engineering solutions that perhaps can mitigate its members' costs. This, however, does not mean that the accuracy requirements should be postponed merely based on the size of the carrier.

The Commission has granted additional time to small carriers to meet prescribed E911 deadlines, but not based on technical infeasibility. Specifically, in the Small Carrier Stay Order, the Commission already gave Tier III carriers blanket relief from E911 obligations until September of this year, more than a year longer than deadlines imposed upon most large carriers.<sup>11</sup> Even in that Order, the Commission granted additional time because the record demonstrated that non-nationwide CMRS carriers had less ability to obtain timely and specific vendor commitments, not technical

\_

The Petition states that even with the thirteen-month extension, rural carriers will face significant costs to deploy Phase II E911 systems. Petition at 8.

Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Order to Stay, 17 FCC Rcd. 14841 (2002) ("Small Carrier Stay Order").

infeasibility.<sup>12</sup> In short, the prior relief granted to Tier III carriers is not relevant to, and does not justify, relief from the accuracy standard here.

For the foregoing reasons, Verizon Wireless urges that if the Commission finds that forbearance from enforcement of E911 accuracy standards is warranted, such relief should apply to all carriers serving rural areas, not only Tier III carriers.

Respectfully submitted,

**VERIZON WIRELESS** 

By:

uT. Sooth, I John T. Scott, III

Vice President and Deputy General Counsel – Regulatory Law

Lolita D. Smith Associate Director Regulatory Matters

Verizon Wireless 1300 I Street, N.W., Suite 400-West Washington, D.C. 20005 (202) 589-3760

January 24, 2003

Id. at ¶ 10. Numerous small carriers sought relief due to equipment delays, including network components and handsets. The Commission reasoned that small carriers needed additional time to allow vendors to focus on meeting their individual needs. *Id.* at ¶¶ 11-13.

## **Certificate of Service**

I hereby certify that on this 24<sup>th</sup> day of January copies of the foregoing "Comments of Verizon Wireless" in WT Docket 02-377 were sent by hand delivery or e-mail to the following parties:

Eugenie Barton Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 8-B458 Washington, DC 20554

Farah E Wligman

Qualex International (Sent via e-mail) qualexint@aol.com

Sarah E. Weisman